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Office Action dated June 30, 2006**ABSTRACT**

Thin film perpendicular magnetic head with a narrow main pole capable of a high recording density in excess of 100 gigabits per square inch and generating a high magnetic recording field exceeding 10 kOe while suppressing remanent magnetic fields occurring immediately after write operations. The perpendicular magnetic head comprises a main pole, a return path for supplying a magnetic flux to that main pole, and a conductive coil for excitation of the main pole and return path. The main pole has a pole width of 200 nanometers or less, and a magnetic multilayer made up of a high saturation flux density layer and low saturation flux density layer. The low saturation flux density layer has a thickness within 0.5 to 5 nanometers, and the high saturation flux density layer has a thickness from 10 to 50.